

Hydric Soils

Swift County, Minnesota

[This report lists only those map unit components that are rated as hydric. Dashes (---) in any column indicate that the data were not included in the database. Definitions of hydric criteria codes are included at the end of the report]

Map symbol and map unit name	Component	Percent of map unit	Landform	Hydric rating	Hydric criteria
GP:					
Pits, gravel-Udipsammments complex	Pits, gravel	80	Moraines, Outwash plains, Stream terraces		---
	Udipsammments	20	Moraines, Outwash plains, Stream terraces		---
J1A:					
Parnell silty clay loam, depressional, 0 to 1 percent slopes	Parnell, depressional	90	Till plains	Yes	2B3, 3
	Vallers	5	Till plains	Yes	2B3
	Winger	5	Till plains	Yes	2B3
J2A:					
La Prairie loam, 0 to 2 percent slopes, occasionally flooded	La Prairie, occasionally flooded	90	Flood plains	No	---
	Lamoure, occasionally flooded	10	Flood plains	Yes	2B3
J3A:					
Arveson sandy loam, 0 to 2 percent slopes	Arveson	80	Outwash plains	Yes	2B3
	Marysland	10	Outwash plains	Yes	2B3
	Malachy	5	Outwash plains	No	---
	Marysland, depressional	5	Outwash plains	Yes	2B3, 3
J4A:					
Rockwell loam, 0 to 2 percent slopes	Rockwell	90	Outwash plains	Yes	2B3
	Arveson	10	Outwash plains	Yes	2B3
J5A:					
Fossum sandy loam, 0 to 2 percent slopes	Fossum	85	Outwash plains	Yes	2B3
	Arveson	10	Outwash plains	Yes	2B3
	Fossum, depressional	3	Outwash plains	Yes	2B3, 3
	Hecla	2	Outwash plains	No	---

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J6A: McDonaldsville silty clay, 0 to 2 percent slopes	McDonaldsville	90	Outwash plains	Yes	2B3
	Somewhat poorly drained soils	10	Outwash plains	No	---
J7A: Sverdrup sandy loam, 0 to 2 percent slopes	Sverdrup	80	Outwash plains	No	---
	Arveson	5	Outwash plains	Yes	2B3
	Clontarf	5	Outwash plains	No	---
	Egeland	5	Outwash plains	No	---
	Estelline	5	Outwash plains	No	---
J7B: Sverdrup sandy loam, 2 to 6 percent slopes	Sverdrup	85	Outwash plains	No	---
	Clontarf	5	Outwash plains	No	---
	Egeland	5	Outwash plains	No	---
	Estelline	5	Outwash plains	No	---
J8A: Egeland sandy loam, 0 to 2 percent slopes	Egeland	80	Outwash plains	No	---
	Clontarf	10	Outwash plains	No	---
	Sverdrup	5	Outwash plains	No	---
	Forada	3	Outwash plains	Yes	2B3
	Hantho	2	Outwash plains	No	---

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J8B:					
Egeland sandy loam, 2 to 6 percent slopes	Egeland	80	Outwash plains	No	---
	Clontarf	5	Outwash plains	No	---
	Sverdrup	5	Outwash plains	No	---
	Embden	3	Outwash plains	No	---
	Torning	3	Outwash plains	No	---
	Eckman	2	Outwash plains	No	---
	Egeland, moderately eroded	2	Outwash plains	No	---
J9A:					
Estelline silt loam, 0 to 2 percent slopes	Estelline	90	Outwash plains	No	---
	Soils that have a thin surface layer	10	Outwash plains	No	---
J10A:					
Sinai silty clay, 0 to 2 percent slopes	Sinai	90	Moraines	No	---
	Fulda	10	Moraines	Yes	2B3
J10B:					
Sinai silty clay, 2 to 6 percent slopes	Sinai	90	Moraines	No	---
	Fulda	10	Moraines	Yes	2B3
J11A:					
Vallers clay loam, 0 to 2 percent slopes	Vallers	85	Till plains	Yes	2B3
	Parnell, depressional	10	Till plains	Yes	2B3, 3
	Balaton	5	Till plains	No	---
J12A:					
Marysland loam, 0 to 2 percent slopes	Marysland	85	Outwash plains	Yes	2B3
	Arveson	10	Outwash plains	Yes	2B3
	Marysland, depressional	3	Outwash plains	Yes	2B3, 3
	Malachy	2	Outwash plains	No	---

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J13A:					
Oldham silty clay loam, depressional, 0 to 1 percent slopes	Oldham, depressional	90	Lake plains	Yes	2B3, 3
	Colvin	5	Lake plains	Yes	2B3
	Vallers	5	Till plains	Yes	2B3
J14F:					
Esmond loam, 18 to 40 percent slopes	Esmond	85	Moraines	No	---
	Emrick	10	Moraines	No	---
	Heimdal	5	Moraines	No	---
J15B:					
Eckman silt loam, 2 to 6 percent slopes	Eckman	80	Lake plains	No	---
	Eckman, moderately eroded	5	Lake plains	No	---
	Egeland	5	Lake plains	No	---
	Hantho	5	Lake plains	No	---
	Zell	5	Lake plains	No	---
J16A:					
Friberg silt loam, depressional, 0 to 2 percent slopes	Friberg, depressional	90	Moraines	Yes	2B3, 3
	Kerkhoven	10	Moraines	Yes	2B3
J17A:					
Quam silty clay loam, depressional, 0 to 1 percent slopes	Quam, depressional	90	Lake plains	Yes	2B3, 3
	Vallers	5	Till plains	Yes	2B3
	Winger	5	Lake plains	Yes	2B3
J18A:					
Malachy sandy loam, 1 to 3 percent slopes	Malachy	85	Outwash plains	No	---
	Arveson	5	Outwash plains	Yes	2B3
	Clontarf	5	Outwash plains	No	---
	Well drained soils	5	Outwash plains	No	---

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J19A:					
Hecla loamy fine sand, 1 to 3 percent slopes	Hecla	80	Outwash plains	No	---
	Clontarf	10	Outwash plains	No	---
	Sverdrup	5	Outwash plains	No	---
	Hamar	3	Outwash plains	Yes	2B3
	Malachy	2	Outwash plains	No	---
J20A:					
Clontarf sandy loam, 1 to 3 percent slopes	Clontarf	80	Outwash plains	No	---
	Hecla	10	Outwash plains	No	---
	Arveson	5	Outwash plains	Yes	2B3
	Well drained soils	5	Outwash plains	No	---
J21A:					
Hamar loamy fine sand, 0 to 2 percent slopes	Hamar	85	Outwash plains	Yes	2B3
	Less sandy soils	8	Outwash plains	Yes	2B3
	Arveson	4	Outwash plains	Yes	2B3
	Hecla	3	Outwash plains	No	---
J22A:					
Renshaw loam, 0 to 3 percent slopes	Renshaw	85	Outwash plains	No	---
	Fordtown	10	Outwash plains	No	---
	Arvilla	3	Outwash plains	No	---
	Fordville	2	Outwash plains	No	---
J23A:					
Lamoure silty clay loam, 0 to 2 percent slopes, occasionally flooded	Lamoure, occasionally flooded	85	Flood plains	Yes	2B3
	Rauville, frequently flooded	10	Flood plains	Yes	2B3, 4
	La Prairie, occasionally flooded	5	Flood plains	No	---

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Map symbol and map unit name	Component	Percent of map unit	Landform	Hydric rating	Hydric criteria
J24F:					
Buse loam, 18 to 40 percent slopes	Buse	85	Till plains	No	---
	Darnen	10	Moraines	No	---
	Barnes	5	Till plains	No	---
J25A:					
Rauville silty clay loam, 0 to 1 percent slopes, frequently flooded	Rauville, frequently flooded	90	Flood plains	Yes	2B3, 4
	Lamoure, occasionally flooded	10	Flood plains	Yes	2B3
J26B:					
Darnen loam, 2 to 6 percent slopes	Darnen	90	Moraines	No	---
	Hokans	5	Moraines	No	---
	Lakepark	5	Moraines	Yes	2B3
J27A:					
Hantho silt loam, 1 to 3 percent slopes	Hantho	85	Lake plains	No	---
	Eckman	5	Lake plains	No	---
	Quam	5	Lake plains	Yes	2B3
	Rondell	3	Lake plains	No	---
	Tara	2	Lake plains	No	---
J28A:					
Vallers clay loam, 0 to 2 percent slopes, bouldery	Vallers, very bouldery	90	Terraces	Yes	2B3
	Parnell, depressional	10	Terraces	Yes	2B3, 3
J29A:					
Cathro muck, depressional, 0 to 1 percent slopes	Cathro, depressional	90	Lake plains	Yes	1, 3
	Colvin	5	Lake plains	Yes	2B3
	Vallers	5	Till plains	Yes	2B3

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J30A:					
Tara silt loam, 1 to 3 percent slopes	Tara	90	Till plains	No	---
	Balaton	5	Till plains	No	---
	Byrne	3	Till plains	No	---
	Quam	2	Till plains	Yes	2B3
J31B:					
Arvilla-Sandberg complex, 2 to 6 percent slopes	Arvilla	45	Outwash plains	No	---
	Sandberg	40	Outwash plains	No	---
	Renshaw	10	Outwash plains	No	---
	Fordtown	5	Outwash plains	No	---
J32A:					
Bigstone silty clay loam, depressional, 0 to 1 percent slopes	Bigstone, depressional	80	Lake plains	Yes	2B3, 3
	Urness, depressional	10	Moraines	Yes	2B3, 3
	Colvin	5	Lake plains	Yes	2B3
	Vallers	5	Till plains	Yes	2B3
J33D2:					
Sisseton-Heimdal complex, 12 to 20 percent slopes, eroded	Sisseton, moderately eroded	65	Moraines	No	---
	Heimdal, moderately eroded	15	Moraines	No	---
	Esmond, moderately eroded	10	Moraines	No	---
	Emrick	5	Moraines	No	---
	Heimdal	5	Moraines	No	---

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Map symbol and map unit name	Component	Percent of map unit	Landform	Hydric rating	Hydric criteria
J34B:					
Byrne-Buse complex, 2 to 6 percent slopes	Byrne	45	Till plains	No	---
	Buse	35	Till plains	No	---
	Buse, moderately eroded	10	Till plains	No	---
	Hokans	5	Till plains	No	---
	Tara	4	Till plains	No	---
	Parnell	1	Depressions	Yes	2B3, 3
J35B:					
Hokans-Buse complex, 2 to 6 percent slopes	Hokans	55	Till plains	No	---
	Buse	15	Till plains	No	---
	Balaton	10	Till plains	No	---
	Barnes, moderately eroded	10	Till plains	No	---
	Svea	9	Till plains	No	---
	Parnell	1	Depressions	Yes	2B3, 3
J36C2:					
Buse-Barnes complex, 6 to 12 percent slopes, eroded	Buse, moderately eroded	45	Till plains	No	---
	Barnes, moderately eroded	20	Till plains	No	---
	Barnes	10	Till plains	No	---
	Buse	10	Till plains	No	---
	Darnen	10	Till plains	No	---
	Langhei, moderately eroded	5	Till plains	No	---

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Map symbol and map unit name	Component	Percent of map unit	Landform	Hydric rating	Hydric criteria
J37D2:					
Langhei-Barnes complex, 12 to 20 percent slopes, eroded	Langhei, moderately eroded	60	Moraines	No	---
	Barnes, moderately eroded	15	Moraines	No	---
	Buse, moderately eroded	10	Till plains	No	---
	Darnen	10	Moraines	No	---
	Barnes	5	Till plains	No	---
J38B:					
Zell-Eckman complex, 2 to 6 percent slopes	Zell	41	Moraines	No	---
	Eckman	39	Moraines	No	---
	Zell, moderately eroded	10	Moraines	No	---
	Egeland	5	Moraines	No	---
	Hantho	5	Moraines	No	---
J38C2:					
Zell-Eckman complex, 6 to 12 percent slopes, eroded	Zell, moderately eroded	46	Moraines	No	---
	Eckman, moderately eroded	20	Moraines	No	---
	Zell	14	Moraines	No	---
	Hantho	10	Moraines	No	---
	Eckman	5	Moraines	No	---
	Egeland	5	Moraines	No	---
J39A:					
Udorthents, shallow (sanitary landfill)	Udorthents, shallow	100	Moraines		---
J40A:					
Foxlake silty clay, 0 to 2 percent slopes	Foxlake	85	Till plains	Yes	2B3
	Audubon	5	Till plains	No	---
	Calcareous soils	5	Till plains	Yes	2B3
	Soils in depressions	5	Till plains	Yes	2B3, 3

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J41A: Urness mucky silty clay loam, depressional, 0 to 1 percent slopes	Urness, depressional	80	Moraines	Yes	2B3, 3
	Bigstone, depressional	10	Lake plains	Yes	2B3, 3
	Colvin	5	Lake plains	Yes	2B3
	Vallers	5	Till plains	Yes	2B3
J42C: Sandberg-Arvilla complex, 6 to 12 percent slopes	Sandberg	60	Outwash plains	No	---
	Arvilla	30	Outwash plains	No	---
	Everts	10	Outwash plains	No	---
J43A: Quam, Cathro, and Urness soils, ponded, 0 to 1 percent slopes	Cathro, ponded	30	Moraines	Yes	1, 3
	Quam, ponded	30	Moraines	Yes	2B3, 3
	Urness, ponded	30	Moraines	Yes	2B3, 3
	Colvin	5	Lake plains	Yes	2B3
	Vallers	5	Till plains	Yes	2B3
J44B: Esmond-Heimdal complex, 2 to 6 percent slopes	Esmond	45	Moraines	No	---
	Heimdal	40	Moraines	No	---
	Esmond, moderately eroded	10	Moraines	No	---
	Emrick	4	Moraines	No	---
	Parnell	1	Depressions	Yes	2B3, 3

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J44C2:					
Esmond-Heimdal complex, 6 to 12 percent slopes, eroded	Esmond, moderately eroded	41	Moraines	No	---
	Heimdal, moderately eroded	25	Moraines	No	---
	Esmond	14	Moraines	No	---
	Heimdal	10	Moraines	No	---
	Emrick	5	Moraines	No	---
	Sisseton, moderately eroded	5	Moraines	No	---
J45F:					
Sandberg sandy loam, 12 to 40 percent slopes	Sandberg	80	Outwash plains	No	---
	Everts	10	Outwash plains	No	---
	Arvilla	5	Outwash plains	No	---
	Sioux	5	Outwash plains	No	---
J46B:					
Byrne silt loam, 2 to 4 percent slopes	Byrne	85	Till plains	No	---
	Hokans	7	Till plains	No	---
	Buse	5	Till plains	No	---
	Quam	3	Till plains	Yes	2B3
J47A:					
Swenoda sandy loam, moderately wet, 1 to 3 percent slopes	Swenoda, moderately wet	85	Outwash plains	No	---
	Clontarf	10	Outwash plains	No	---
	Egeland	5	Outwash plains	No	---

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Map symbol and map unit name	Component	Percent of map unit	Landform	Hydric rating	Hydric criteria
J48A:					
Bigstone and Parnell soils, ponded, 0 to 1 percent slopes	Bigstone, ponded	40	Moraines	Yes	2B3, 3
	Parnell, ponded	40	Moraines	Yes	2B3, 3
	Colvin	10	Moraines	Yes	2B3
	Vallers	10	Moraines	Yes	2B3
J49A:					
Lakepark-Parnell, depressional, complex, 0 to 2 percent slopes	Lakepark	50	Moraines	Yes	2B3
	Parnell, depressional	35	Moraines	Yes	2B3, 3
	Emrick	8	Moraines	No	---
	Vallers	7	Till plains	Yes	2B3
J50A:					
Balaton-Tara complex, 1 to 3 percent slopes	Balaton	45	Lake plains	No	---
	Tara	35	Lake plains	No	---
	McIntosh	10	Lake plains	No	---
	Well drained soils	5	Lake plains	No	---
	Winger	5	Lake plains	Yes	2B3
J51A:					
Bearden-Quam, depressional, complex, 0 to 2 percent slopes	Bearden	60	Lake plains	No	---
	Quam, depressional	30	Lake plains	Yes	2B3, 3
	Rondell	7	Lake plains	No	---
	Winger	3	Lake plains	Yes	2B3
J52A:					
Rondell silty clay loam, 1 to 3 percent slopes	Rondell	85	Lake plains	No	---
	Zell	9	Lake plains	No	---
	Bearden	5	Lake plains	No	---
	Quam	1	Depressions	Yes	2B3, 3

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Map symbol and map unit name	Component	Percent of map unit	Landform	Hydric rating	Hydric criteria
J53A: Ortonville loam, 1 to 3 percent slopes	Ortonville	85	Moraines	No	---
	Well drained soils	10	Moraines	No	---
	Vallers	5	Moraines	Yes	2B3
J54A: Marysland loam, depressional, 0 to 1 percent slopes	Marysland, depressional	90	Outwash plains	Yes	2B3, 3
	Marysland	10	Outwash plains	Yes	2B3
J55A: Sedgeville loam, channeled, 0 to 2 percent slopes, occasionally flooded	Sedgeville, channeled, occasionally flooded	90	Flood plains	Yes	2B3
	Soils that are frequently flooded	10	Flood plains	Yes	2B3, 4
J56A: Winger-Balaton-Parnell, depressional, complex, 0 to 3 percent slopes	Winger	40	Lake plains	Yes	2B3
	Balaton	30	Lake plains	No	---
	Parnell, depressional	20	Lake plains	Yes	2B3, 3
	Colvin	5	Lake plains	Yes	2B3
	Vallers	5	Lake plains	Yes	2B3
J57A: Balaton loam, 1 to 3 percent slopes	Balaton	85	Till plains	No	---
	Tara	5	Till plains	No	---
	Well drained soils	5	Till plains	No	---
	Vallers	3	Till plains	Yes	2B3
	Hamerly	2	Till plains	No	---

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Map symbol and map unit name	Component	Percent of map unit	Landform	Hydric rating	Hydric criteria
J58B:					
Torning-Egeland complex, 2 to 6 percent slopes	Torning	45	Outwash plains	No	---
	Egeland	40	Outwash plains	No	---
	Clontarf	10	Outwash plains	No	---
	Sverdrup	5	Outwash plains	No	---
J59A:					
Urness mucky silty clay loam, sandy substratum, ponded, 0 to 1 percent slopes	Urness, sandy substratum, ponded	90	Outwash plains	Yes	2B3, 3
	Marysland	10	Outwash plains	Yes	2B3
J60B:					
Hattie-Audubon complex, 1 to 4 percent slopes	Hattie	46	Till plains	No	---
	Audubon	44	Till plains	No	---
	Foxlake	10	Till plains	Yes	2B3
J60C:					
Hattie-Audubon complex, 4 to 10 percent slopes	Hattie	60	Till plains	No	---
	Audubon	30	Till plains	No	---
	Foxlake	10	Till plains	Yes	2B3
J61A:					
Svea loam, 1 to 3 percent slopes, bouldery	Svea, very bouldery	90	Terraces	No	---
	Parnell, depressional	5	Terraces	Yes	2B3, 3
	Vallers, very bouldery	5	Terraces	Yes	2B3
J62C:					
Buse-Barnes complex, 2 to 12 percent slopes, very bouldery	Buse, very bouldery	45	Terraces	No	---
	Barnes, very bouldery	26	Terraces	No	---
	Hokans	14	Terraces	No	---
	Svea, very bouldery	10	Terraces	No	---
	Darnen	5	Terraces	No	---

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J62F:					
Buse-Barnes complex, 12 to 40 percent slopes, very bouldery	Buse, very bouldery	50	Terraces	No	---
	Barnes, very bouldery	40	Terraces	No	---
	Darnen	10	Terraces	No	---
J63A:					
Ortonville-Vallers-Parnell, depressionnal, complex, 0 to 3 percent slopes	Ortonville	45	Moraines	No	---
	Vallers	35	Moraines	Yes	2B3
	Parnell, depressionnal	20	Moraines	Yes	2B3, 3
J64A:					
Quam silty clay loam, 0 to 2 percent slopes	Quam	90	Till plains	Yes	2B3
	Colvin	5	Till plains	Yes	2B3
	Quam, depressionnal	5	Till plains	Yes	2B3, 3
J65A:					
Shakopee silty clay, 0 to 2 percent slopes	Shakopee	90	Outwash plains	Yes	2B3
	Soils in depressions	10	Outwash plains	Yes	2B3, 3
J66A:					
Emrick loam, 1 to 3 percent slopes	Emrick	85	Moraines	No	---
	Lakepark	10	Moraines	Yes	2B3
	Heimdal	5	Moraines	No	---
J67A:					
Fordtown loam, 1 to 3 percent slopes	Fordtown	85	Outwash plains	No	---
	Renshaw	8	Outwash plains	No	---
	Spottswood	7	Outwash plains	No	---
J68A:					
Kerkhoven-Friberg, depressionnal, complex, 0 to 2 percent slopes	Kerkhoven	55	Moraines	Yes	2B3
	Friberg, depressionnal	35	Moraines	Yes	2B3, 3
	Emrick	10	Moraines	No	---

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L33A:					
Kandiyohi clay, 0 to 2 percent slopes	Kandiyohi	80	Flats, Moraines, Rises	No	---
	Cosmos	10	Flats, Moraines, Swales	Yes	2B3
	Arkton	5	Hills, Moraines	No	---
	Lura, firm substratum, depressional	5	Depressions, Moraines	Yes	2B3, 3
L33B:					
Kandiyohi clay, 2 to 5 percent slopes	Kandiyohi	85	Till plains	No	---
	Cosmos	10	Till plains	Yes	2B3
	Okoboji	5	Till plains	Yes	2B3, 3
L34A:					
Cosmos silty clay, 0 to 2 percent slopes	Cosmos	85	Till plains	Yes	2B3
	Kandiyohi	10	Till plains	No	---
	Okoboji	5	Till plains	Yes	2B3, 3
L164A:					
Lura silty clay, depressional, firm substratum, 0 to 1 percent slopes	Lura, firm substratum, depressional	90	Depressions, Moraines	Yes	2B3, 3
	Corvuso	5	Depressions, Flats, Moraines, Rims	Yes	2B3
	Cosmos	5	Flats, Moraines, Swales	Yes	2B3
M-W:					
Water, miscellaneous	Water, miscellaneous	100	---		---
W:					
Water	Water	100	---		---

Hydric Soils

This table lists the map unit components that are rated as hydric soils in the survey area. This list can help in planning land uses; however, onsite investigation is recommended to determine the hydric soils on a specific site (National Research Council, 1995; Hurt and others, 2002).

The three essential characteristics of wetlands are hydrophytic vegetation, hydric soils, and wetland hydrology (Cowardin and others, 1979; U.S. Army Corps of Engineers, 1987; National Research Council, 1995; Tiner, 1985). Criteria for all of the characteristics must be met for areas to be identified as wetlands. Undrained hydric soils that have natural vegetation should support a dominant population of ecological wetland plant species. Hydric soils that have been converted to other uses should be capable of being restored to wetlands.

Hydric soils are defined by the National Technical Committee for Hydric Soils (NTCHS) as soils that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part (Federal Register, 1994). These soils, under natural conditions, are either saturated or inundated long enough during the growing season to support the growth and reproduction of hydrophytic vegetation.

The NTCHS definition identifies general soil properties that are associated with wetness. In order to determine whether a specific soil is a hydric soil or nonhydric soil, however, more specific information, such as information about the depth and duration of the water table, is needed. Thus, criteria that identify those estimated soil properties unique to hydric soils have been established (Federal Register, 2002). These criteria are used to identify map unit components that normally are associated with wetlands. The criteria used are selected estimated soil properties that are described in "Soil Taxonomy" (Soil Survey Staff, 1999) and "Keys to Soil Taxonomy" (Soil Survey Staff, 2003) and in the "Soil Survey Manual" (Soil Survey Division Staff, 1993).

If soils are wet enough for a long enough period of time to be considered hydric, they should exhibit certain properties that can be easily observed in the field. These visible properties are indicators of hydric soils. The indicators used to make onsite determinations of hydric soils are specified in "Field Indicators of Hydric Soils in the United States" (Hurt and others, 2002).

Hydric soils are identified by examining and describing the soil to a depth of about 20 inches. This depth may be greater if determination of an appropriate indicator so requires. It is always recommended that soils be excavated and described to the depth necessary for an understanding of the redoximorphic processes. Then, using the completed soil descriptions, soil scientists can compare the soil features required by each indicator and specify which indicators have been matched with the conditions observed in the soil. The soil can be identified as a hydric soil if at least one of the approved indicators is present.

Map units that are dominantly made up of hydric soils may have small areas, or inclusions, of nonhydric soils in the higher positions on the landform, and map units dominantly made up of nonhydric soils may have inclusions of hydric soils in the lower positions on the landform.

The criteria for hydric soils are represented by codes in the table (for example, 2B3). Definitions for the codes are as follows:

1. All Histels except for Folistels, and Histosols except for Folists.
2. Soils in Aquic suborders, great groups, or subgroups, Albolls suborder, Historthels great group, Histoturbels great group, Pachic subgroups, or Cumulic subgroups that:
 - A. are somewhat poorly drained and have a water table at the surface (0.0 feet) during the growing season, or
 - B. are poorly drained or very poorly drained and have either:
 - 1) a water table at the surface (0.0 feet) during the growing season if textures are coarse sand, sand, or fine sand in all layers within a depth of 20 inches, or
 - 2) a water table at a depth of 0.5 foot or less during the growing season if permeability is equal to or greater than 6.0 in/hr in all layers within a depth of 20 inches, or
 - 3) a water table at a depth of 1.0 foot or less during the growing season if permeability is less than 6.0 in/hr in any layer within a depth of 20 inches.
3. Soils that are frequently ponded for long or very long duration during the growing season.
4. Soils that are frequently flooded for long or very long duration during the growing season.

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